



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,895	06/22/2006	Yang-Soo Park	4555-0111PUS1	1739

2292 7590 10/19/2009  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

CHRISS, JENNIFER A

ART UNIT	PAPER NUMBER
----------	--------------

1794

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/19/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,895	<b>Applicant(s)</b> PARK ET AL.	
	<b>Examiner</b> JENNIFER A. CHRISS	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1 - 4 in the reply filed on May 18, 2009 is acknowledged.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 1/16/09 was considered, however, it appears to be a duplicate of the IDS submitted on 6/22/06.

### ***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Korea on 12/26/03. It is noted, however, that applicant has not filed a certified copy of the 10-2003-0097275 application as required by 35 U.S.C. 119(b).

### ***Claim Objections***

4. Claim 1 is objected to because of the following informalities: claim 1 recites "a false twisted mixing yarn". The use of the word "mixing" is awkward and does not appear to impact the interpretation of the claim. Please remove the term "mixing". Additionally, please change "220~320 yarns/inch" to "220-320 yarns/inch" and change "70~180 g/m<sup>2</sup>" to "70-180 g/2". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Art Unit: 1794

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 – 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 requires “ultra yarns (monofilament fibrils)”. What are ultra yarns? Based on Applicant’s specification, the Examiner submits that Applicant intends to claim “ultra fine yarns”. Please amend to include the term "fine" in the claims.

8. Regarding claim 3, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Additionally, claim 3 requires “a pattern forming weave of a figured weave”. Applicant has not defined "a pattern forming weave of a figured weave" and it is not a term of art. The claim is no further examination on its merits - please amend to clarify the language.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1 -2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (WO 03/087447).

Art Unit: 1794

Lee et al. is directed to a textured yarn with different shrinkage and excellent suede effect (Title).

Lee et al. teach creating a yarn with different shrinkage by air-texturizing an effect yarn and a core yarn, wherein at least one or two kinds of two-component composite yarn having a monofilament fineness of 0.001 to 0.3 after dividing or extracting an extraction component is used as the effect yarn and a thermoplastic multifilament yarn is used as the core yarn (page 7, lines 9 - 16). The shrinkage of the multifilament yarn or core yarn is preferably 5 - 50% (page 9, lines 14 - 18) and is made of polyester (page 9, lines 25 - 26 and page 10, lines 1 - 5). The effect yarn is also polyester (page 11, lines 1 - 20) and the shrinkage rate of the effect yarn is lower than 15% (page 12, lines 1 - 5). The two component composite yarn can be false twisted (page 12, lines 18 - 23). The yarn is used as the warp and/or weft of a woven fabric (page 20, lines 1 - 5) and can be subjected to a fiber raising or buffing process (page 20, lines 5 - 10) which the Examiner equates to Applicant's "cross-linking/friction material" process.

Lee et al. teach the claimed invention but fail to teach that the sum of the warp and weft is 220 – 320 yarns/inch, the thickness of the fabric is less than 0.3 mm and the weight of the fabric is 70 – 180 gsm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the sum of warp and weft, thickness and weight of the fabric since it has been held that, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the

Art Unit: 1794

optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The burden is upon the Applicant to demonstrate that the claimed sum of warp and weft, thickness and weight are critical and has unexpected results. In the present invention, one would have been motivated to optimize the sum of warp and weft, thickness and weight motivated by the desire to create a textured fabric having the desired level of durability and air permeability based on the final specifications.

11. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (US 5215816 A).

Shibata et al. is directed to a woven fabric comprising an intermingled or twisted yarn comprised of continuous low shrinkage filaments and continuous high shrinkage filaments, where the low shrinkage filaments have a monofilament denier of 1.2 or less (column 3, lines 35 – 55). The high shrinkage filaments have a shrinkage percentage of 10 – 50% (column 3, lines 60 – 69). The yarn may be false twisted (column 4, lines 10 – 15) and is polyester (column 2, lines 5 - 60). Shibata et al. teach

Shibata et al. teach the claimed invention but fail to teach that the sum of the warp and weft is 220 – 320 yarns/inch, the thickness of the fabric is less than 0.3 mm and the weight of the fabric is 70 – 180 gsm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the sum of warp and weft, thickness and weight of the fabric since it has been held that, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover

Art Unit: 1794

the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The burden is upon the Applicant to demonstrate that the claimed sum of warp and weft, thickness and weight are critical and has unexpected results. In the present invention, one would have been motivated to optimize the sum of warp and weft, thickness and weight motivated by the desire to create a hospital fabric having the desired level of durability and air permeability based on the final specifications.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. CHRISS whose telephone number is (571)272-7783. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 6 p.m., first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer A Chriss/  
Primary Examiner, Art Unit 1794

/J. A. C./  
Primary Examiner, Art Unit 1794